	BUDGE	T ITEM JU	ISTIFICATIO	N SHEET				DATE:		February 20	004
			P-40								
APPROPRIATION/BU	JDGET ACTIV	/ITY			P-1 ITEM N	OMENCLAT	URE	BLI 420400			
OTHER PROCUREM	ENT, NAVY/	BA-3 Avia	tion Suppor	t Equipment	WEAPONS	RANGE SU	PPORT EQU	IPMENT			
Program Element for	Code B Items	:			Other Relat	ed Program	Elements				
	Prior	ID								То	
	Years	Code	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Total
QUANTITY											
COST			*	**							
(In Millions)	\$1,026.3		\$54.0	\$39.0	\$44.6	\$31.9	\$42.6	\$41.9	\$42.1	Cont.	Cont.

*\$6.9M MTES FY 03 Congressional Add: \$8.4M PMRF FY-03 Congressional Add.

**\$8.2M increase in funding in FY 04 for Training Transformation (Test and Training Enabling Architecture (TENA) \$1.2M; U.S. Joint Forces Command (USJFCOM) \$7.0M.

This budget line item provides the resources to implement the Navy Fleet Training Range (FTR) Instrumentation Program Plan. These FTRs provide the primary means of fleet combat readiness training. The plan addresses the following major procurement areas: Electronic Warfare (EW) simulators, Systems Replacement and Modernization (SRAM), Communications Upgrade, Large Area Tracking Range (LATR), Underwater Ranges, Mobile Remote Emitter System (MRES), and generic systems such as range computer systems, simulation, surveillance systems, Tactical Aircrew Combat Training System (TACTS), and Fleet Readiness Program (FRP); formerly, Training Resource Strategy (TRS) range instrumentation projects. The integral parts of these major range programs include but are not limited to the following: voice communications, weapons scoring systems, display consoles, radars, tracking subsystems, control/computation subsystems, display/debriefing subsystems, processors, HF/VHF/UHF receivers, transmitters/transceivers, multiplexers, intercom circuits, encoding devices, frequency interface control systems, and other specialized equipment.

Justification: Operational forces of the Navy's air, surface, and subsurface units are being equipped with the latest complex and sophisticated weapon systems to achieve and maintain high standards of fleet readiness. The FTRs must be furnished with training equipment capable of simulating, tracking, displaying, and debriefing the latest combat environments (e.g. electronic warfare). This equipment provides the Navy with the capability to: conduct safe fleet training exercises; achieve a high state of readiness; objectively evaluate training effectiveness as well as the strategy and tactics employed; evaluate the performance of equipment; and measure reliability and accuracy of operational weapon systems.

MOBILE REMOTE EMITTER SYSTEM (MRES)

The MRES is a medium power Electronic Warfare simulator system capable of illuminating aircraft, ships, and various other signal collection platforms with emitters from 2 to 18 GHz. The system will also be capable of receiving active Electronic Countermeasures (ECM) transmissions from 500MHz to 18GHz for spectrum viewing and evaluation of ECM techniques. The MRES will use the Tactical Aircrew Combat Training System (TACTS)/Tactical Combat Training System (TCTS) and/or video tracking modes for position pointing sources.

The MRES system will be capable of generating threat scenarios to support non-instrumented test and training sites and also support Navy and Joint exercises. The MRES will be a ruggedized, highly reliable and maintainable system. It will consist of off-the-shelf components incorporating minor modifications as necessary to meet unique mission support areas. Congressional increase of \$5.3M in FY02 to procure a mobile remote emitter system (MRES) at Fallon Range Training Range Complex (FRTC).

MOBILE THREAT EMITTER SIMULATOR (MTES)

The Fallon Mobile Threat Emitter Simulator (MTES) is a full power, mobile, SA10/20 simulator. The System will be deployed to the Fallon Training Range Complex provide Electronic Warfare training to navy aircrews. Congressional increase of \$6.9M in FY03 to procure a mobile threat emitter simulator (MTES) at Fallon Range Training Range Complex (FRTC).

THREAT RADAR UPGRADE (FALLON)

The Fallon Training Range Complex Electronic Warfare (EW) capabilities consists of 47 emitters on 37 sites located largely within the Dixie Valley area. This effort will upgrade the EW range to provide new sites and emitters that reflect real world air defense systems that force the aircrew to detect, identify, and defeat or evade the threat.

	BUDGE	T ITEM JU	ISTIFICATIO	N SHEET				DATE:		February 20	004
			P-40								
APPROPRIATION/B	UDGET ACTIV	/ITY			P-1 ITEM N	OMENCLAT	URE	BLI 420400			
OTHER PROCURE	MENT, NAVY/	BA-3 Avia	tion Suppor	t Equipment	WEAPONS	RANGE SU	PPORT EQU	IIPMENT			
Program Element for	Code B Items	s:			Other Relat	ed Program	Elements				
	Prior	ID								То	
	Years	Code	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Total
QUANTITY											
COST			*	**							
(In Millions)	\$1,026.3		\$54.0	\$39.0	\$44.6	\$31.9	\$42.6	\$41.9	\$42.1	Cont.	Cont.

ELECTRONIC WARFARE THREAT UPGRADE (MAEWR/DARE COUNTY)

The Mid-Atlantic Electronic Warfare Range (MAEWR) and Dare County, North Carolina have a requirement for EW emitters to provide the necessary threat environment Capabilities required at MAEWR include early warning and acquisition radars, Man Portable Air Defense System (MAMPADS) and Threat Radar Emitter Simulator.

ELECTRONIC WARFARE THREAT SYSTEMS (SCORE)

The EW Threat Systems (SCORE) has a requirement for EW Systems and an integrated air defense system for Adversary Island to support Fleet Training.

SYSTEMS REPLACEMENT AND MODERNIZATION (SRAM):

The SRAM program provides for the procurement of numerous minor equipments/instrumentation needed at all Navy training ranges. SRAM procurements replace and modernize economically unmaintainable systems and equipment in order to increase range efficiency. Funding for installation of minor equipment is required in all years for all ranges.

INTEGRATED TARGET CONTROL SYSTEM (ITCS) UPGRADE

ITCS Upgrade will provide an unmanned target control system designed to replace the legacy drone control systems deployed at Navy Target Training Ranges. The upgrade will provide all command and control, tracking and telemetry functions for the target systems. The upgrade will control the family of subscale Navy targets and provide a range of 400 nautical miles with an over-the-horizon relay. The FY2003 program will provide one system for Fleet Composite Squadron Six.

LATR FREQUENCY CONVERSION TO 433 MHz

The LATR was initially delivered with a airborne data link operating at a frequency of 141 MHz. This was found to be operationally unsuitable for the Southern California Off Shore Range due to excessive radio frequency interference. Converting the down link frequency to 433 MHz was found to resolve the problem. Subsequent testing at the Virginia Capes (VACAPES) LATR revealed that performance was significantly improved there by using the 433 MHz frequency. As a result, the VACAPES LATR system has been converted to the 433 MHz frequency.

LATR GROUND SYSTEM REHOST

The existing Software Support Activity (SSA) Facility cannot fully support the development and testing for LATR.

TACTICAL COMBAT TRAINING SYSTEM (TCTS)

The Tactical Combat Training System (TCTS) will procure fixed, transportable, and mobile range instrumentation equipment for both shore-based (aircrew training) and deployable (ship/sub/aircrew training) applications. TCTS instrumentation will transmit exercise scenarios; simulate/stimulate all exercise participants sensors/weapons with the exercise scenario; track all exercise participants and events, e.g., weapons engagements; and provide accurate, realistic, and timely feedback. TCTS is building on non-developmental technology developed for existing tactical training range systems. The system will be interoperable with the USAF P5 CTS system. The TCTS consists of airborne instrumentation called Participant Subsystems and Ground Subsystems. The Ground Subsystem has 4 configurations: Transportable, Portable, Shipboard and Fixed Ground Subsystem.

TARGETS/SMART TARGETS

A variety of targets and visual cues are required to train deploying aircrews in the demands of time-critical targeting and Network Centric Warfare. Mobile targets such as vehicles and visually representative shapes are required for use at Fallon. Small boat targets are required to support aviation and surface training at SCORE. Ground and mobile targets, integrated with Smokey SAMs, are required at Yuma to support training readiness in weapon targeting and delivery.

	BUDGE	T ITEM JU	JSTIFICATIO	N SHEET				DATE:		February 200	04
			P-40								
APPROPRIATION/BU	JDGET ACTI\	/ITY			P-1 ITEM N	OMENCLAT	URE	BLI 420400			
OTHER PROCUREM	IENT, NAVY/	BA-3 Avia	tion Suppor	t Equipmen	WEAPONS	RANGE SU	PPORT EQU	IPMENT			
Program Element for	Code B Items	:			Other Relat	ted Program	Elements				
	Prior	ID								То	
	Years	Code	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Total
QUANTITY											
COST			*	**							•
(In Millions)	\$1,026.3		\$54.0	\$39.0	\$44.6	\$31.9	\$42.6	\$41.9	\$42.1	Cont.	Cont.

PACIFIC FLEET PORTABLE ASW RANGE

FY07 funds the procurement of a portable underwater range to support ASW training for Forward Deployed Naval Forces (FDNF). The system will be capable of tracking submarines, weapons, targets, and unmanned underwater vehicles, and will be able to be deployed, operated, and recovered by fleet personnel. Most Navy training instrumentation is located within CONUS to provide individual and unit training for developing basic operating skills. Large exercises such as COMPTUEX, FLEETEX, AND JTFEX can also be supported to some extent when conducted in the vicinity of the fixed fleet ranges at SCORE, AFWTF, AND LWTC. When units deploy overseas, there are very few instrumented training facilities available for honing skills to maintain a high state of readiness. Consequently, readiness can begin to deteriorate due to a lack of adequate training facilities.

PORTABLE MINE WARFARE (MIW) RANGE

This project procures a portable Mine Warfare (MIW) training system to be used in conjunction with the existing Versatile Exercise Mine System (VEMS) in the Gulf of Mexico (GOMEX). The portable MIW training system will enable status information from the VEMS to be relayed in real time to participants engaged in MIW training exercises. This will provide exercise participants with real time feedback on the effectiveness of their MIW tactics.

PACIFIC MISSILE RANGE FACILITY (PMRF) UPGRADES

FY2003 Congressional increase of \$8.4M will be utilized for training range instrumentation upgrades.

TEST & TRAINING ENABLING ARCHITECTURE (TENA)

The integration of TENA into existing US Navy Tactical Training Ranges will enable participants, such as those in Tactical Aircrew Combat Training System (TACTS) and Large Area Tracking Range (LATR), to be interoperable with other Joint National Training Center (JNTC) TENA capable assets, and lays the groundwork for subsequent TENA integration with future systems, such as P5/Tactical Combat Training System (TCTS). The requirement also addresses integration of TENA into training range assets, such as (1) Threat Systems (EW devices/emitters), which enable interoperability, communications flexibility and mobility with other test and training systems, and (2) Weapons Scoring Systems, which will enable publishing of weapons impact coordinates in TENA complaint format.

U.S. JOINT FORCES COMMAND (USJFCOM)

The USJFCOM Joint Training will purchase a core set of communications hardware and software to construct the communication architecture for Joint National Training Capability (JNTC) Live-Virtual-Constructive (LVC) efforts. This equipment is essential to the JNTC LVC events in order to fully distribute model simulator, live force, C4I and network data to the sites identified and approved by all services in the JNTC communications implementation plan. The proposed components will establish the basic communications architecture required to support the GCCC, it's associated hub-sites, as well as the level 1 and 2 sites that are in the future of the JNTC federation. FY-04-09 USJFCOM funding was inadvertently realigned to Naval Air Systems Command (NAVAIR).

TRAINING RESOURCE STRATEGY (TRS)

This project supports the Navy's transition of fleet training from Vieques Puerto Rico to various locations along the East Coast and Gulf of Mexico. The TRS invests in or procures training instrumentation and tracking systems (air, surface and subsurface), threat presentation systems, scoring systems and communications systems at several existing training locations including but not limited to Oceana, Cherry Point, Beaufort, Townsend, Key West and Atlantic Underwater Test and Evaluation (AUTEC). Specifically, the FY2003 program procures a threat representitive early warning/acquisition radar and a coastal threat system, additional naval surface fire support scoring systems (both fixed and portable), voice and data communication improvements, laser, straffe, and bomb scoring systems and upgrades, targets upgrades, expanded electronic warfare threat control, and a ship self radiated noise measurement system.

The FY2004 program provides an additional coastal threat system, upgrades to existing threats to make them react to aircrew actions, radiating emitter simulator systems capable of stimulating shipboard anti-cruise missile defense systems, a communication jammer, additional range interconnectivity, additional targets, and upgrades to Naval Surface Fire Support (NSFS) Scoring System (Portable).

The FY2005 program provides an additional coastal threat system, more upgrades to existing threats, additional radiating emitter simulator systems, additional range interconnectivity, additional targets, and replaces obsolete components in the Large Area Tracking Range (LATR) system.

	OR AGGREGATED I	BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS P-40a APPROPRIATION/BLIDGET ACTIVITY P-1 ITEM						February 2004			
APPROPRIATION/BUDGET ACTIVITY	t Equipment		WEADONS DAN	P-1 ITEM	NOMENCLA	TURE					
OTHER PROCUREMENT, NAVY/ BA-3 Aviation Suppor	ID ID	Prior	WEAPONS KAI	IGE SUPPORT I	LOUPMENT		 			То	
Procurement Items	Code	Years	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Complete	Total
ELECTRONIC WARFARE THREAT RADAR UPGRADE (FALLON)											
QUANTITY COST (In Thousands)											0
EW THREAT SYSTEMS (MAEWR/DARE)											
QUANTITY COST (In Thousands)											0
EW THREAT SYSTEMS (SCORE) QUANTITY											0
COST (In Thousands)											0
MRES (FALLON) QUANTITY		1									1
COST (In Thousands)		5,300									5,300
MTES (FALLON) QUANTITY			1								1
COST (In Thousands)			6,376								6,376
SRAM QUANTITY		VAR	VAR	VAR	VAR						
COST (In Thousands)		65,221	3,952	4,346	3,452					CONT	CONT
COMM UPGRADES QUANTITY		1									1
COST (In Thousands)		787									787
ITCS UPGRADES QUANTITY		2	1								3
COST (In Thousands)		500	316								816
CCN-II 1/ QUANTITY			N/A								
COST (In Thousands)			186								186
LATR SYSTEM QUANTITY		1									1
COST (In Thousands)		4226									4,226
LATR FREQ CONV TO 433MHz		447									447
QUANTITY COST (In Thousands)		147 3710									147 3,710
LATR GROUND SYSTEM REHOST											
QUANTITY COST (In Thousands)		3 97									3 97
LATR ATSTS REPLACEMENT											
QUANTITY COST (In Thousands)											0
LATR PORTABLE TEST UNIT REPLACEMENT											
QUANTITY COST (In Thousands)							_				0
TEST & TRAINING ENABLING ARCHITECTURE (TENA)											
QUANTITY COST (In Thousands)				VAR 500							500
U.S. JOINT FORCES COMMAND (USJFCOM) 2/											-00
GUANTITY COST (In Thousands)			1	VAR 7,000	VAR 12,000					CONT	CONT
TCTS				7,000	12,000					CONT	CONT
TRANSPORTABLE/MOBILE CORE											
QUANTITY COST (In Thousands)				1 381							1 381
FIXED RANGE REPEATER											
QUANTITY COST (In Thousands)				1 269							1 269

P-40a	AGGREGATED I	-			DATE: February 2004								
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/ BA-3 Aviation Support E	Equipment		WEAPONS RAI	P-1 ITEM NGE SUPPORT E	NOMENCLATE OF THE PROPERTY OF	TURE		-					
Procurement Items	ID Code	Prior Years	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total		
JTRS RETROFIT KITS													
QUANTITY			+							286	286		
COST (In Thousands)										CONT	CONT		
SHIPBOARD GROUND SUBSYSTEM													
QUANTITY					1					4	5		
COST (In Thousands)					1,020					CONT	CONT		
TRANSPORTABLE GROUND SUBSYSTEM													
QUANTITY COST (In Thousands)											0		
COST (III THOUSANDS)													
PORTABLE GROUND SUBSYSTEM											ĺ		
QUANTITY					4		_			16	20		
COST (In Thousands)					100			-		400	500		
FIXED GROUND SUBSYSTEM			<u> </u>	<u> </u>			<u> </u>						
QUANTITY									•		0		
COST (In Thousands)				ļ			ļ				0		
REMOTE RANGE UNIT		+		+		 	+	1		 	——		
QUANTITY		1		1		1					0		
COST (In Thousands)											0.0		
A POSTO/ONA PT TA POSTO											 		
ARGETS/SMART TARGETS QUANTITY		+									 		
COST (In Thousands)										CONT	CONT		
													
UNDERWATER RANGES PORTABLE UNDERWATER TRAINING RANGE (PACFLT)		-	-								-		
QUANTITY											0		
COST (In Thousands)											0		
DODTADI E MIM TRAINING CVCTEM											 		
PORTABLE MIW TRAINING SYSTEM QUANTITY		1									0		
COST (In Thousands)											0.0		
PMRFCONGRESSIONAL ADD		1/45											
QUANTITY COST (In Thousands)		VAR 15,000									15,000		
COST (III THOUSands)		13,000									13,000		
PMRFUPGRADES													
QUANTITY COST (In Thousands)		VAR 8,100	VAR 5,992								14,092		
COST (In Thousands)		8,100	5,992								14,092		
PMRF MRES		1				İ							
QUANTITY		1									1		
COST (In Thousands)		7,500									7,500		
'RS 2/		+		+		 	+	1		 	——		
SURFACE SEARCH RADAR	+	+	+	+		 	1			 			
QUANTITY	+	+	1								1		
COST (In Thousands)		1	270								270		
(1	2.0			1				İ	2.3		
EARLY WARNING/ACQUISITION RADAR													
QUANTITY			1								1		
COST (In Thousands)			5,046								5,046		
COASTAL THREAT SYSTEMS													
QUANTITY			1	1	1				· ·		3		
COST (In Thousands)			6,343	6,519	4,903						17,765		
											1		

BUDGET ITEM JUSTIFICATION SHEET P-40a	FOR AGGREGATED IT	TEMS			DATE:			February 2004				
APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE								
OTHER PROCUREMENT, NAVY/ BA-3 Aviation Sup	port Equipment		WEAPONS RA	NGE SUPPORT	EQUIPMENT							
Procurement Items	ID Code	Prior Years	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total	
REACTIVE TRES												
QUANTITY				11	8						19	
COST (In Thousands)				7,331	5,336						12,667	
RADAR EMISSION SIMULATING SET												
QUANTITY				3	5					15	23	
COST (In Thousands)				1,800	3,200					11,250	16,250	
COMMUNICATION JAMMERS												
QUANTITY				1	1						2	
COST (In Thousands)				1,083	900						1,983	
NSFS SCORING RANGE (FIXED)												
QUANTITY			1								1	
COST (In Thousands)			10,325								10,325	
NSFS SCORING SYSTEM (PORTABLE)												
QUANTITY			9	1							10	
COST (In Thousands)			2,638	2,319							4,957	
COMMUNICATION SYSTEM UPGRADES												
QUANTITY			VAR									
COST (In Thousands)			1,050								1,050	
OGT (III Thousands)			1,000								1,000	
RANGE SCORING SYSTEM UPGRADES QUANTITY												
COST (In Thousands)			VAR 431	VAR 30							461	
TARGETS						-						
QUANTITY				VAR	VAR							
COST (In Thousands)				200	212					CONT	CONT	
TRACKING SYSTEM UPGRADES												
QUANTITY			VAR	VAR	VAR							
COST (In Thousands)			1,280	700	2,944						4,924	
ADNS												
QUANTITY			1								1	
COST (In Thousands)			227								227	
SSRNM RANGE								1				
QUANTITY			1								1	
COST (In Thousands)			2,885								2,885	
KEY WEST PORT OPS EQIUPMENT								+				
QUANTITY					1		1	1		VAR		
COST (In Thousands)										1,400	1,400	
OTHER COSTS		915,888	6,696	6,473	10,576			1		CONT	CONT	
OTHER GOOTS		313,000	0,030	0,473	10,570					CONT	CONT	
TOTAL FUNDING		1,026,329	54,013	38,951	44,643			1		CONT	CONT	
					<u> </u>		<u> </u>	1				
1/ FY-95 prior year bill paid with FY-03 funds.		+		+	 	 	 	+		+		
		İ	1		Ì		Ì			İ		

	WEAPONS SYSTEM COST ANALYSIS P-5				DATE: February 2004							
	ATION/BUDGET ACTIVITY			ID Code		-						
	curement, Navy ion Support Equipment					v	/EAPONS RA	43SC NGE SUPPO	RT EQUIPMEN	т		
COST	ELEMENT OF COST	ID	Prior	FY 2003				FY2004			FY2005	
CODE		Code	Years Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	ELECTRONIC WARFARE											
SC102	THREAT RADAR UPGRADE (FALLON)											
SC103 SC104	EW THREAT SYSTEM (MAEWR/DARE) EW THREAT SYSTEM (SCORE)											
SC104 SC002	MRES (FALLON)	N/A	5,300									
SC703	MTES (FALLON)	N/A	5,300	1	6.376	6.376						
SC004	SRAM	IN/A	65,221	VAR	VAR	3,952	VAR	VAR	4,346	VAR	VAR	3,452
SC018	COMMUNICATION UPGRADES		787	VAIX	VAIC	3,332	VAIC	VAIX	4,540	VAIX	VAIC	3,432
SC118	ITCS UPGRADE		500	1	316	316						
SC027	CCN-II 1/			N/A	N/A	186						
SC027	LATR SYSTEM		4,226	IN/A	IVA	100						
SCXXX	U.S. JOINT FORCES COMMAND (USJFCOM)		1,220				VAR	VAR	7,000	VAR	VAR	12,000
SC133	TEST & TRAINING ENABLING ARCHITECTURE (TENA)						VAR	VAR	500			,
SC134	LATR FREQ CONVERSION TO 433 MHz		3,710									
SC135	LATR GROUND SYSTEM REHOST		97									
SC136	LATR ATSTS REPLACEMENT											
SC137	LATR PORTABLE TEST UNIT REPLACEMENT											
SC039	TCTS											
	TRANSPORTABLE/MOBILE CORE						1	381	381			
	FIXED RANGE REPEATER						1	269	269			
SC037	JTRS RETROFIT KITS											
SC038	SHIPBOARD GROUND SUBSYSTEM									1	1,020	1,020
SC039	TRANSPORTABLE GROUND SUBSYSTEM											
SC138 SC139	PORTABLE GROUND SUBSYSTEM FIXED GROUND SUBSYSTEM									4	25	100
SC140	REMOTE RANGE UNIT											
SC041	TARGETS/SMART TARGETS											
00011	UNDERWATER RANGES											
SC012	PORTABLE UNDERWATER TRAINING RANGE (PACFLT)											
SC112	PORTABLE MIW TRAINING SYSTEM											
SC700	PMRF CONGRESSIONAL ADD	N/A	15,000									
SC702	PMRF UPGRADES	N/A	8,100	VAR	VAR	5,992						
SC701	PMRF MRES	N/A	7,500			.,						
	TRS											
SC141	SURFACE SEARCH RADAR			1	270	270						
SC142	EARLY WARNING/ACQUISITION RADAR			1	5,046	5,046						
SC143	COASTAL THREAT SYSTEMS			1	6,343	6,343	1	6,519	6,519	1	4,903	4,903
SC144	REACTIVE TRES						11	666.46	7,331	8	667	5,336
SC145	RADAR EMISSION SIMULATING SET						3	600	1,800	5	640	3,200
SC146	COMMUNICATION JAMMERS						1	1,083	1,083	1	900	900
SC147	NSFS SCORING RANGE (FIXED)			1	10,325	10,325						
SC148	NSFS SCORING SYSTEM (PORTABLE)			9	293.12	2,638	1	2,319	2,319			
SC149	COMMUNICATION SYSTEM UPGRADES			VAR	VAR	1,050						
SC150	RANGE SCORING SYSTEM UPGRADES			VAR	VAR	431	VAR	VAR	30	145		
SC151 SC152	TARGETS TRACKING SYSTEM UPGRADES			VAR	VAR	1.280	VAR VAR	VAR VAR	200 700	VAR VAR	VAR VAR	212
SC152 SC153	ADNS			VAR 1	VAR 227	1,280	VAK	VAK	/00	VAK	VAK	2,944
SC153	SSRNM RANGE			1	2,885	2,885						
SC155	KEY WEST PORT OPS EQIUPMENT			'	2,000	2,000						
SC831	PRODUCTION ENGINEERING, OTHER	N/A	86,770			5.329			4.103			8.156
SC860	ACCEPTANCE TEST & EVALUATION	N/A	7,336			145			665			636
SC900	INSTALLATION OF EQUIP-NON FMP	N/A	10,476			300			350			840
SC971	ILS, OTHER RANGES	N/A	33,225			922			1,355			944
	VARIOUS 2/		778,081									
	r year bill paid with FY-03 funds.		,,									
	t identified against this cost element reflects total prior year funding associate	d with co	st elements no lo	nger financed in F	Y2002 and beyon	d.						
		-	1,026,329		 	54,013			38,951		-	44,643

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT	(P-SA)					,	A. DATE February	2004		
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE	1	i esiuai y	SUBHEAD	
Other Procurement, Navy BA-3 AVIATION SUPPORT EQUIPMENT					1A/E A	PONS RANGE SUPPORT EQ	LUDMENT		4250	
					CONTRACT			DATE OF	43SC SPECS	IF NO
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	FIRST DELIVERY	AVAILABLE NOW	WHEN AVAILABLE
ELECTRONIC WARFARE		, , , ,								
SC002 MRES										
2002	1	5,300	NAVAIR	5/02	FFP/OPTION	Northrop/Grumman/Amherst	07/02	06/04	YES	N/A
SC703 MTES (FALLON)										
2003	1	6,376	TMSO/Redstone	4/03	CPFF/OPTION	Sierra Research	05/03	6/05	YES	N/A
SC004 SYS REPL & MOD (SRAM)										
2004	VAR	VAR	FED IND SUP CTR	VAR	VAR	VAR	**	08/04	YES	N/A
2005	VAR	VAR	FED IND SUP CTR	VAR	VAR	VAR	**	08/05	YES	N/A
SC138 TCTS										
TRANSPORTABLE/MOBILE CORE		004	100011110	44/00	550	01: 57 4 5 7	04/04	00/04		F/0.4
2004	1	381	ACC/WMR	11/02	FFP	Cubic Defense Application	01/04	09/04	NO	5/04
SC140 TCTS FIXED RANGE REPEATER	1	269	ACC/WMR	11/02	FFP	Cubic Defense Application	01/04	09/04	NO	5/04
2004	'	269	ACC/WWR	11/02	FFF	Cubic Defense Application	01/04	09/04	INO	5/04
SC038 SHIPBOARD GROUND SUBSYSTEM										
2005	1	1020	ACC/WMR	11/02	FFP	Cubic Defense Application	10/04	11/05	N/A	N/A
SC138 PORTABLE GROUND SUBSYSTEM 2005	4	25	ACC/WMR	11/02	FFP	Cubic Defense Application	10/04	07/05	NO	5/04
2005	4	25	ACC/WMR	11/02	FFF	Cubic Defense Application	10/04	07/05	NO	5/04
U.S. JOINT FORCES COMMAND (USJFCOM)										
2004	VAR	VAR	VAR	VAR	VAR	VAR	N/A	N/A	N/A	N/A
2005	VAR	VAR	VAR	VAR	VAR	VAR	N/A	N/A	N/A	N/A
SC133 TEST & TRAINING ENABLING ARCHITECTURE (TENA)										
2004	VAR	VAR	VAR	VAR	VAR	VAR	TBD	TBD	NO	N/A
TRS_										
SC141 TRS										
2003 SURFACE SEARCH RADAR	1	270	NSWC Corona	N/A	PX	NSWC Corona	11/03	11/04	N/A	N/A
SC142 TRS										
SC 142 TRS 2003 EARLY WARNING/ACQUISITION RADAR	1	5046	NAWCWDCL	9/03	CPFF	LOCKHEED MARTIN	11/03	04/06	NO	10/03
<u>SC143 TRS</u>										
2003 COASTAL THREAT SYSTEMS 2004 COASTAL THREAT SYSTEMS	1	6343 6519	NAWCWDCL NAWCWDCL	5/03 10/03	CPFF CPFF	LOCKHEED MARTIN LOCKHEED MARTIN	11/03 12/03	04/06 07/06	NO NO	10/03 10/03
2005 COASTAL THREAT SYSTEMS	1	4903	NAWCWDCL	10/03	CPFF	LOCKHEED MARTIN	01/05	01/07	NO	10/03
SC144 TRS	44	000.40	NAMOWIDO	40/00	ODEE	LOCKLIFED MADTIN	40/00	00/05	NO	40/00
2004 REACTIVE TRES 2005 REACTIVE TRES	11 8	666.46 667	NAWCWDCL NAWCWDCL	10/03 11/04	CPFF CPFF	LOCKHEED MARTIN LOCKHEED MARTIN	12/03 01/05	06/05 06/06	NO NO	10/03 10/03
	Ĭ	-5.					1,,00	22,00		. 3,00
SC145 TRS	_	05-	LIAMONE · ·				0.75			
2004 RADAR EMISSION SIMULATING SET 2005 RADAR EMISSION SIMULATING SET	3 5	600 640	NAWCWD PT Mugu NAWCWD PT Mugu	N/A N/A	PX PX	NAWCWD PT Mugu NAWCWD PT Mugu	01/04 12/04	11/04 12/05	N/A N/A	N/A N/A
2000 TARDAK EMIGOION SIMOLATING SET	5	040	14AVVCVVD F1 Wlugu	N/A	FA	INAVVOVVD FT Wingu	12/04	12/05	IN/M	IN/A
<u>SC146 TRS</u>										
2004 COMMUNICATION JAMMERS	1	1083	NAWCWDCL	11/03	FFP	TBD	03/04	01/05	NO	N/A
2005 COMMUNICATION JAMMERS	1	900	NAWCWDCL	11/04	FFP	TBD	01/05	01/06	NO	N/A
<u>SC147 TRS</u>										
2003 NSFS SCORING RANGE (FIXED)	1	10325	NUWC Newport	N/A	PX	NUWC Newport	08/04	03/06	N/A	N/A

SC148 TRS	BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P	·5A)					Weapon System	A	. DATE		
BA-3 AVIATION SUPPORT EQUIPMENT							C. P-1 ITEM NOMENCLATURE		February		
Cost Element/Fiscal year Cost Element/Fiscal year Cost Co						WE	APONS RANGE SUPPORT EQU	JIPMENT		43SC	
1 2319 NSWC Indian Head N/A PX NSWC Indian Head 02/04 02/06 N/A SC149 TRS 2003 COMMUNICATION SYSTEM UPGRADES VAR VAR NSWC Corona N/A PX NSWC Corona 2/04 6/04 N/A SC150 TRS 2003 RANGE SCORING SYSTEM UPGRADES VAR VAR NSWC Corona N/A PX NSWC Corona 12/03 12/04 N/A 2004 RANGE SCORING SYSTEM UPGRADES VAR VAR NSWC Corona N/A PX NSWC Corona 3/04 12/04 N/A SC151 TRS 2004 TARGETS VAR VAR VAR VAR VAR VAR VAR VAR VAR VAR	Cost Element/	QUANTITY	COST			CONTRACT METHOD	CONTRACTOR	AWARD	DATE OF FIRST	SPECS AVAILABLE	IF NO WHEN AVAILABL
1 2319 NSWC Indian Head N/A PX NSWC Indian Head 02/04 02/06 N/A SC149 TRS 2003 COMMUNICATION SYSTEM UPGRADES VAR VAR NSWC Corona N/A PX NSWC Corona 2/04 6/04 N/A SC150 TRS 2003 RANGE SCORING SYSTEM UPGRADES VAR VAR NSWC Corona N/A PX NSWC Corona 12/03 12/04 N/A 2004 RANGE SCORING SYSTEM UPGRADES VAR VAR NSWC Corona N/A PX NSWC Corona 3/04 12/04 N/A SC151 TRS 2004 TARGETS VAR VAR VAR VAR VAR VAR VAR VAR VAR VAR											
SC149 TRS VAR VAR NSWC Corona N/A PX NSWC Corona 2/04 6/04 N/A SC150 TRS 2003 RANGE SCORING SYSTEM UPGRADES VAR VAR NSWC Corona N/A PX NSWC Corona 12/03 12/04 N/A 2004 RANGE SCORING SYSTEM UPGRADES VAR VAR VAR NSWC Corona N/A PX NSWC Corona 12/03 12/04 N/A SC151 TRS VAR VAR<	,	9									N/A
VAR VAR VAR VAR NSWC Corona N/A PX NSWC Corona 2/04 6/04 N/A	2004 NSFS SCORING SYSTEM (PORTABLE)	1	2319	NSWC Indian Head	N/A	PX	NSWC Indian Head	02/04	02/06	N/A	N/A
SC150 TRS VAR VAR VAR NSWC Corona N/A PX NSWC Corona 12/03 12/04 N/A 2004 RANGE SCORING SYSTEM UPGRADES VAR VAR VAR NSWC Corona N/A PX NSWC Corona 12/03 12/04 N/A SC151 TRS 2004 TARGETS VAR VAR </td <td>SC149 TRS</td> <td></td>	SC149 TRS										
VAR VAR	2003 COMMUNICATION SYSTEM UPGRADES	VAR	VAR	NSWC Corona	N/A	PX	NSWC Corona	2/04	6/04	N/A	N/A
VAR VAR	SC150 TRS										
SC151 TRS VAR V	2003 RANGE SCORING SYSTEM UPGRADES	VAR	VAR	NSWC Corona	N/A	PX	NSWC Corona	12/03	12/04	N/A	N/A
VAR VAR	2004 RANGE SCORING SYSTEM UPGRADES	VAR	VAR	NSWC Corona	N/A	PX	NSWC Corona	3/04	12/04	N/A	N/A
VAR VAR	SC151 TRS										
VAR		VAR	VAR	VAR	VAR	VAR	VAR	3/04	08/04	N/A	N/A
VAR										-	N/A
NAWCWDCL/NSWC VAR	SC152 TRS										
2003 TRACKING SYSTEM UPGRADES VAR VAR Corona VAR VAR <th< td=""><td>30102 11KO</td><td></td><td></td><td>NAWCWDCI /NSWC</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	30102 11KO			NAWCWDCI /NSWC							
2004 TRACKING SYSTEM UPGRADES VAR VAR NAWCWDCL VAR VAR VAR 3/04 12/04 N/A 2005 TRACKING SYSTEM UPGRADES VAR VAR VAR VAR VAR VAR VAR 01/05 01/06 N/A	2003 TRACKING SYSTEM UPGRADES	VAR	VAR		VAR	VAR	VAR	3/04	09/04	N/A	N/A
2005 TRACKING SYSTEM UPGRADES VAR VAR VAR VAR VAR VAR 01/05 01/06 N/A				NAWCWDCL		1					N/A
											N/A
		****	*****		*****		****	0.700	0.,00		
SC154 TRS	SC154 TRS										
2003 SSRNM RANGE 1 2885 NUWC Keyport N/A PX NUWC Keyport 1/04 6/05 N/A	2003 SSRNM RANGE	1	2885	NUWC Keyport	N/A	PX	NUWC Keyport	1/04	6/05	N/A	N/A

D. REMARKS

**SRAM, TARGETS, AND PMRF Upgrades consists of a variety of projects each FY with award dates starting when funds are released.